

GEOLOGIC DATA FORM FOR CONVENTIONAL ASSESSMENT UNITS (Version 5.1, June 4, 2007)

Assessment Geologist:	T.E. Moore	Date:	22-May-08
Region:	Arctic Ocean	Number:	0
Province:	Lomonosov-Makarov	Number:	0001
Total Petroleum System:	Lomonosov Ridge Mesozoic-Cenozoic Composite	Number:	000101
Assessment Unit:	Makarov Basin Margin	Number:	00010101
Scenario:		Number:	
Based on Data as of:			
Notes from Assessor:			

Area of assessment unit:	<u>154,697</u>	square kilometers
Minimum assessed accumulation size:	<u>50</u>	mmboe (grown)
No. of discovered accumulations exceeding minimum size:	Oil:	0
	Gas:	0

Uncertainty Class:	Check One	Number
Producing fields	_____	_____
Discoveries	_____	_____
Wells	_____	_____
Seismic	X	_____
No seismic	_____	_____

Median size (grown) of discovered oil accumulations (mmbo):	1st 3rd _____	2nd 3rd _____	3rd 3rd _____
Median size (grown) of discovered gas accumulations (bcfg):	1st 3rd _____	2nd 3rd _____	3rd 3rd _____

<u>Purpose</u>	<u>Analog or Analog Set</u>
1 <u>Number</u>	Passive margin, rifted passive margin
2 <u>Sizes</u>	Passive margin, rifted passive margin
3 <u>Composition</u>	Global statistics
4 <u></u>	

Assessment Unit (name, no.)
Scenario (name, no.)

Makarov Basin Margin, 00010101

Probability of occurrence (0-1.0)

Scenario Probability:

Assessment-Unit Probabilities: (Adequacy for at least one undiscovered field of minimum size)

Attribute	Probability of occurrence (0-1.0)
1. CHARGE: Adequate petroleum charge:	0.4
2. ROCKS: Adequate reservoirs, traps, and seals:	0.5
3. TIMING OF GEOLOGIC EVENTS: Favorable timing:	0.7
Assessment-Unit GEOLOGIC Probability (Product of 1, 2, and 3):	0.140

UNDISCOVERED ACCUMULATIONS

Number of Undiscovered Accumulations: How many undiscovered accumulations exist that are at least the minimum size?: (uncertainty of fixed but unknown values)

Total Accumulations:	minimum (>0)	1	median	11	maximum	38
Oil/Gas Mix:	minimum (>0)	0.1	mode	0.5	maximum	0.9
	X	# of oil accumulations / # of total accumulations				
		# of oil accumulations / # of gas accumulations				
		# of gas accumulations / # of oil accumulations				
Oil Accumulations:	minimum (>0)	1	median	5	maximum	34
Gas Accumulations:	minimum (>0)	1	median	5	maximum	34

Sizes of Undiscovered Accumulations: What are the sizes (**grown**) of the above accumulations?: (variations in the sizes of undiscovered accumulations)

Oil in Oil Accumulations (mmbo):	minimum	50	median	100	maximum	2000
Gas in Gas Accumulations (bcfg):	minimum	300	median	600	maximum	12000

RATIOS FOR UNDISCOVERED ACCUMULATIONS, TO ASSESS COPRODUCTS

(variations in the properties of undiscovered accumulations)

<u>Oil Accumulations:</u>	minimum	median	maximum
Gas/oil ratio (cfg/bo):	100	1000	20000
NGL/gas ratio (bngl/mmcf):	5	25	85
<u>Gas Accumulations:</u>	minimum	median	maximum
Liquids/gas ratio (bliq/mmcf):	5	25	75

SELECTED ANCILLARY DATA FOR UNDISCOVERED ACCUMULATIONS

(variations in the properties of undiscovered accumulations)

<u>Oil Accumulations:</u>	minimum	median	maximum
API gravity (degrees):	20	38	55
Viscosity (centipoise)	0.01	3	30
Sulfur content of oil (%):	0	0.3	1.5
Depth (m) of water (if applicable):	1500	2000	3000

	minimum	F75	median	F25	maximum
Drilling Depth (m):	500		2000		4000

<u>Gas Accumulations:</u>	minimum	median	maximum
Inert gas content (%):	0	2	10
Carbon dioxide content (%):	0	1.5	10
Hydrogen sulfide content (%):	0	0.5	3.5
Depth (m) of water (if applicable):	1500	2000	3000

	minimum	F75	median	F25	maximum
Drilling Depth (m):	500		2000		4000

Assessment Unit (name, no.)
Scenario (name, no.)

Makarov Basin Margin, 00010101

ALLOCATIONS OF POTENTIAL ADDITIONS TO RESERVES TO ARCTIC AREA

1 North of Arctic Circle

100 area % of the AU

Oil in Oil Accumulations: 100 volume % of the AU

Gas in Gas Accumulations: 100 volume % of the AU

2 South of Arctic Circle

 area % of the AU

Oil in Oil Accumulations: volume % of the AU

Gas in Gas Accumulations: volume % of the AU

Assessment Unit (name, no.)
Scenario (name, no.)

Makarov Basin Margin, 00010101

ALLOCATIONS OF POTENTIAL ADDITIONS TO RESERVES TO COUNTRIES

1 Offshore

100 area % of the AU

Oil in Oil Accumulations: 100 volume % of the AU

Gas in Gas Accumulations: 100 volume % of the AU

2 Onshore portion of:

 area % of the AU

Oil in Oil Accumulations: volume % of the AU

Gas in Gas Accumulations: volume % of the AU

3 Onshore portion of:

 area % of the AU

Oil in Oil Accumulations: volume % of the AU

Gas in Gas Accumulations: volume % of the AU

4 Onshore portion of:

 area % of the AU

Oil in Oil Accumulations: volume % of the AU

Gas in Gas Accumulations: volume % of the AU

5 Onshore portion of:

 area % of the AU

Oil in Oil Accumulations: volume % of the AU

Gas in Gas Accumulations: volume % of the AU

6 Onshore portion of:

 area % of the AU

Oil in Oil Accumulations: volume % of the AU

Gas in Gas Accumulations: volume % of the AU